

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 010427WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US02/30386	International filing date (day/month/year) 24 September 2002 (24.09.2002)	Priority date (day/month/year) 27 September 2001 (27.09.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): H04Q 7/20 and US Cl.: 455/436,440,437,525		
Applicant QUALCOMM, INCORPORATED		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>4</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none">I <input checked="" type="checkbox"/> Basis of the reportII <input type="checkbox"/> PriorityIII <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicabilityIV <input type="checkbox"/> Lack of unity of inventionV <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statementVI <input type="checkbox"/> Certain documents citedVII <input type="checkbox"/> Certain defects in the international applicationVIII <input type="checkbox"/> Certain observations on the international application		
Date of submission of the demand 09 April 2003 (09.04.2003)	Date of completion of this report 07 January 2004 (07.01.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Yuwen Pan <i>Rugenia Logan</i> Telephone No. 107-806-8377	

Form PCT/IPEA/409 (cover sheet)(July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/30386

I. Basis of the report

1. With regard to the elements of the international application:*

☒ the international application as originally filed.☒ the description:

pages 1-16 _____ as originally filed

pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☒ the claims:

pages 17-22 _____, as originally filed

pages NONE _____, as amended (together with any statement) under Article 19pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☒ the drawings:

pages 1-3 _____, as originally filed

pages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.☐ the sequence listing part of the description:pages NONE _____, as originally filedpages NONE _____, filed with the demandpages NONE _____, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☐ The amendments have resulted in the cancellation of:☐ the description, pages NONE☐ the claims, Nos. NONE☐ the drawings, sheets/fig NONE5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US02/30386**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>2-20</u>	YES
	Claims <u>1</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-20</u>	NO
Industrial Applicability (IA)	Claims <u>1-20</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claim 1 is lack novelty under PCT Article 33(2) as being anticipated by Horner et al (US005357544A), discloses a communication receiver comprising:

A receiver portion (see figure 2 and item 16) for down converting a received signal to base band frequency (see column 3 and lines 44-57);

A low pass filter (see figure 2 and item 30) for filtering said base band frequency to produce on-channel received samples (see column 6 and line 47- column 7 and line 9)

A processor for processing said base band frequency to produce out-of- channel received samples (see column 4 and lines 48-62)..

Claims 3,6,9-11,13-15,17-19,20 are an inventive step under PCT Article 33(3) as being obvious over Horner. Horner discloses a method in a communication system comprising:

Down converting a received signal to produce on-channel and out-of-channel received samples (see figure 2, column 3 and lines 44-57);

Processing said on-channel received samples to decode on channel information (see figure 2, 3e-3l, column 7 and line 59- column 9 and line 4)

Processing said out-of-channel received sampled to determined a link quality (pilot signal, see column 2 and lines 43-45)

It would have been obvious to one ordinary skill in the art at the time the invention was made to utilize GPS system with Horner's method such that position of selective base station is determined for better hard handoff.

Claims 2,4,5,7,8,12,16 are an inventive step under PCT Article 33(3) as being obvious over Horner et al in view of Bottomley (WO 98/19491) and Willey (US005854785A).

Horner doesn't disclose a low noise amplifier for amplifying said received signal for process in said receiver.

Bottomley discloses a low noise amplifier for amplifying said received signal for process in said receiver (see page 6 and line 24-page 7 and line 15).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Bottomley with Horner's system such that received signal would be amplified for further decoding processing.

Horner doesn't disclose said receiver back-end portion includes a number of fingers element and searcher for processing said on-channel and out-of-channel received samples.

Willey discloses a receiver back-end portion includes a number of fingers element and searcher for processing said on-channel and out-of-channel received samples (see figure 1 and items 107 and 109, column 5 and line 22- column 6 and line 26).

It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Willey with Horner's system such that signal strengths from neighbor base stations are measured simultaneously.

----- NEW CITATIONS -----